



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,637	02/13/2004	Kang Soo Seo	46500-000575/US	5373
36593 7590 11/12/2009 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195				
EXAMINER				
LE, MICHAEL				
ART UNIT		PAPER NUMBER		
2163				
MAIL DATE		DELIVERY MODE		
11/12/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/777,637

**Applicant(s)**

SEO ET AL.

**Examiner**

MICHAEL LE

**Art Unit**

2163

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 May 2009.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1.6 and 12-32 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1.6 and 12-32 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-85/08)  
Paper No(s)/Mail Date 6/30/09, 7/15/09, 8/31/09, 9/22/09, 10/5/09  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_  
5) ☐ Notice of Inventor's Patent Application  
6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Summary and Status of Claims***

1. This Office Action is in response to Applicant's reply filed June 30, 2009.
2. Claims 25-32 are newly added.
3. Claims 1, 6, and 12-32 are pending.
4. Claims 1, 6, 12, 13, 16-20, and 23-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Senoh (US Patent Pub 2003/0007780) of record.
5. Claims 14, 15, 21, 22, and 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Senoh, in view of Tiara et al. (US Patent 6,009,234) (Tiara) of record.
6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 102***

7. **Claims 1, 6, 12, 13, 16-20, 23, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Senoh (US Patent Pub 2003/0007780) of record.**
8. In regards to **claim 1**, Senoh discloses a recording medium storing an executable data structure for managing playback control of a data stream by a reproducing device (Senoh at para. 0042), comprising:
  - a. an information file including a first playback indicator for managing a first playback of the recording medium when the recording medium is first read, the first playback indicator identifying a segment for execution at the first playback of the recording medium (Senoh at para. 0047 (ResumeMarker is interpreted as the first

- playback indicator, which identifies a program (i.e., prog\_info)), the segment being included in a separate file from the information file, the first playback indicator indicating a name of the identified segment (Senoh at para. 0046 (the PRG\_INFO (i.e., identified segment) is in the program manager file (i.e., separate file)));
- b. the separate file including the identified segment, the identified segment including at least one navigation command for launching a playlist file, the playlist file being separate from the separate file (Senoh at para. 0046 "program manager file"; para. 0048-9 (PRG\_INFO is interpreted as the identified segment and PrgID is interpreted as the at least one navigation command));
- c. the playlist file launched by the navigation command, the playlist file including a playitem representing a playing interval in a clip of a data stream for the first playback (Senoh at para. 0046 "playlist manager file"; para. 0050-1 (playback program information is interpreted as the playitem)); and
- d. a stream file including the data stream. Senoh at para. 0045, lines 1-5.
9. In regards to **claim 6**, Senoh discloses the recording medium of claim 1, wherein the information file is stored in a main directory, which is a sub-directory of a root directory for the recording medium. Senoh at fig. 2. (management directory is interpreted as the main directory.)
10. In regards to **claim 12**, Senoh discloses a method of recording a data structure for managing playback control of a data stream, comprising:
- a. recording an information file on a recording medium, the information file including a first playback indicator for managing a first playback of the recording medium when the recording medium is first read (Senoh at para. 0047 (ResumeMarker is

- interpreted as the first playback indicator, which identifies a program (i.e., prog\_info)), the first playback indicator identifying a segment for execution at the first playback of the recording medium, the segment being included in a separate file from the information file, the first playback indicator indicating a name of the identified segment (Senoh at para. 0046 (the PRG\_INFO (i.e., identified segment) is in the program manager file (i.e., separate file)));
- b. recording the identified segment in the separate file on the recording medium, the identified segment including at least one navigation command for launching a playlist file, the playlist file being separate from the separate file (Senoh at para. 0046 "program manager file"; para. 0048-9 (PRG\_INFO is interpreted as the identified segment and PrgID is interpreted as the at least one navigation command));
- c. recording the playlist file launched by the navigation command on the recording medium, the playlist file including a playitem representing a playing interval in a clip of a data stream for the first playback (Senoh at para. 0046 "playlist manager file"; para. 0050-1 (playback program information is interpreted as the playitem)); and
- d. recording a stream file including the data stream on the recording medium. Senoh at para. 0045, lines 1-5.
11. In regards to **claim 13**, Senoh discloses a method of reproducing a data structure for managing playback control of a data stream comprising:
- a. reproducing a information file from a recording medium, the information file including a first playback indicator for managing a first playback of the recording medium when the recording medium is first read (Senoh at para. 0047 (ResumeMarker is

- interpreted as the first playback indicator, which identifies a program (i.e., prog\_info)), the first playback indicator identifying a segment for execution at the first playback of the recording medium, the segment being included in a separate file from the information file, the first playback indicator indicating a name of the identified segment (Senoh at para. 0046 (the PRG\_INFO (i.e., identified segment) is in the program manager file (i.e., separate file)));
- b. reproducing the separate file including the identified segment, the identified segment including at least one navigation command for launching a playlist file, the playlist file being separate from the separate file (Senoh at para. 0046 "program manager file"; para. 0048-9 (PRG\_INFO is interpreted as the identified segment and PrgID is interpreted as the at least one navigation command));
  - c. reproducing the playlist file launched by the navigation command, the playlist file including a playitem representing a playing interval in a clip of a data stream for the first playback (Senoh at para. 0046 "playlist manager file"; para. 0050-1 (playback program information is interpreted as the playitem)); and
  - d. reproducing a stream file including the data stream. Senoh at para. 0043, 0045, lines 1-5.
12. In regards to **claim 16**, Senoh discloses the recording medium of claim 1, wherein the segment further includes navigation commands for initializing playback of the data stream and terminating playback of the data stream. Senoh at Fig. 2; para. 0049<sup>1</sup>.

---

<sup>1</sup> Fig. 2 shows that the program manager file contains the navigation information. Paragraph 0049 discloses a PRG\_INFO table, which includes playback time duration (i.e., when to initialize and when to terminate).

13. **Claims 17 and 18** are the same as claim 16 in the form of a method and are therefore rejected for the same reasons.
14. **Claims 19 and 20** are the same as claim 16 in the form of an apparatus and are therefore rejected for the same reasons.
15. In regards to **claim 23**, Senoh discloses the recording medium of claim 1, further comprising a clip information file including timing information of the stream file, the clip information file and the stream file being separate files and having a one to one correspondence. Senoh at Fig. 2; para. 0045; para. 0052<sup>2</sup>.
16. In regards to **claim 24**, Senoh discloses the recording medium of claim 1, wherein the playitem is a pair of IN and OUT points corresponding to positions on a time axis of the clip of the data stream. Senoh at para. 0051<sup>3</sup>.
17. **Claims 25 and 26** are essentially claims 23 and 24 respectively in the form of a method and are rejected for the same reasons.
18. **Claims 27 and 28** are essentially claims 23 and 24 respectively in the form of a method and are rejected for the same reasons.

***Claim Rejections - 35 USC § 103***

19. **Claims 14, 15, 21, 22, and 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Senoh, in view of Tiara et al. (US Patent 6,009,234) (Tiara) of record.**

---

<sup>2</sup> \*.MOD files are interpreted as stream files and \*.MOI files are interpreted as clip information files.

<sup>3</sup> Playback program information (i.e., playitem) includes StartPos (i.e., IN) and EndPos (i.e., OUT) points corresponding to start and end time.

20. In regards to **claim 14**, Senoh discloses an apparatus for recording a data structure for managing playback control of a recording medium, comprising:

- a. a recording and playback system configured to record data on the recording medium (Senoh at para. 0043, 0045, lines 1-5) ; and
- b. the recording and playback system configured to record an information file on the medium, (Senoh at para. 0047 (ResumeMarker is interpreted as the first playback indicator, which identifies a program (i.e., prog\_info))), the first playback indicator identifying a segment for execution at the first playback of the recording medium when the recording medium is first read, the segment being included in a separate file from the information file, the first playback indicator indicating a name of the identified segment (Senoh at para. 0046 (the PRG\_INFO (i.e., identified segment) is in the program manager file (i.e., separate file)));
- c. the recording and playback system configured to record the separate file including the identified segment on the recording medium, the identified segment including at least one navigation command for launching a playlist file, the playlist file being separate from the separate file (Senoh at para. 0046 "program manager file"; para. 0048-9 (PRG\_INFO is interpreted as the identified segment and PrgID is interpreted as the at least one navigation command));
- d. the recording and playback system configured to record the playlist file launched by the navigation command, the playlist file including a playitem representing a playing interval in a clip of a data stream for the first playback. (Senoh at para. 0046 "playlist



manager file"; para. 0050-1 (playback program information is interpreted as the playitem)); and

e. recording a stream file including the data stream. Senoh at Fig. 10.

21. Senoh does not expressly disclose a pickup and a controller for recording a data structure.

22. Tiara discloses a head unit (i.e., pickup) and a processing unit (i.e., controller) for recording and reproducing content on a medium. Tiara at Fig. 2; elements 32 and 44; col. 9, lines 31-47.

23. Senoh and Tiara are analogous art because they are both directed toward the same field of endeavor of content recording and reproduction on a medium.

24. At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the apparatus of Senoh by adding the features of a pickup and controller, as taught by Tiara.

25. The motivation for doing so would have been because optical discs are common recording mediums for video and audio playback. Therefore, one of ordinary skill would be motivated to expand the advantageous features taught by Senoh to optical discs.

26. In regards to **claim 15**, Senoh discloses an apparatus for reproducing a data structure for managing playback control of a recording medium, comprising:

a. a recording and playback system configured to reproduce a data on the recording medium (Senoh at para. 0043, 0045, lines 1-5) ; and

b. the recording and playback system configured to reproduce an information file on the medium, (Senoh at para. 0047 (ResumeMarker is interpreted as the first playback

- indicator, which identifies a program (i.e., prog\_info))), the first playback indicator identifying a segment for execution at the first playback of the recording medium when the recording medium is first read, the segment being included in a separate file from the information file, the first playback indicator indicating a name of the identified segment (Senoh at para. 0046 (the PRG\_INFO (i.e., identified segment) is in the program manager file (i.e., separate file)));
- c. the recording and playback system configured to reproduce the separate file including the identified segment including at least one navigation command for launching a playlist file, the playlist file being separate from the separate file (Senoh at para. 0046 "program manager file"; para. 0048-9 (PRG\_INFO is interpreted as the identified segment and PrgID is interpreted as the at least one navigation command));
- d. the recording and playback system configured to reproduce the playlist file launched by the navigation command, the playlist file including a playitem representing a playing interval in a clip of the data stream for the first playback (Senoh at para. 0046 "playlist manager file"; para. 0050-1 (playback program information is interpreted as the playitem)); and
- e. the recording and playback system configured to reproduce a stream file including the data stream. Senoh at Fig. 12.
27. Senoh does not expressly disclose a pickup and a controller for reproducing a data structure.

28. Tiara discloses a head unit (i.e., pickup) and a processing unit (i.e., controller) for recording and reproducing content on a medium. Tiara at Fig. 2; elements 32 and 44; col. 9, lines 31-47.

29. Senoh and Tiara are analogous art because they are both directed toward the same field of endeavor of content recording and reproduction on a medium.

30. At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the apparatus of Senoh by adding the features of a pickup and controller, as taught by Taira.

31. The motivation for doing so would have been because optical discs are common recording mediums for video and audio playback. Therefore, one of ordinary skill would be motivated to expand the advantageous features taught by Senoh to optical discs.

32. In regards to **claim 21**, Senoh in view of Taira discloses the apparatus of claim 15, further comprising:

- a. a source depacketizer, configured to depacketize source packets into transport packets (Senoh at para. 0052<sup>4</sup>);
- b. a de-multiplexor, operably coupled to the source depacketizer, configured to demultiplex the transport packets into at least one elementary stream (Senoh at Fig. 1, element 2<sup>5</sup>); and

---

<sup>4</sup> The existence of a depacketizer is evident in that the data is sized as packets.

<sup>5</sup> In an reproduction of an MPEG file, it is necessary to demux the data stream into the video encoding to be decoded by the decoder.

- c. a decoder, operably coupled to the de-multiplexor, configured to decode the elementary stream to an original data stream to be displayed on a display. Senoh at Fig. 1, element 4; para. 0143 “MPEG decoder”.
33. In regards to **claim 22**, Senoh in view of Taira discloses the apparatus of claim 21, wherein the source depacketizers, the de-multiplexor, the decoder, and the controller are part of a video disk play system. Senoh at Fig. 1, element 2.
34. In regards to **claim 29**, Senoh in view of Taira discloses the apparatus of claim 14 wherein the controller is further configured to control the pickup to record a clip information file including timing information of the stream file, the clip information file and the stream file being separate files and having one to one correspondence. Senoh at Fig. 2; para. 0045; para. 0052<sup>6</sup>.
35. In regards to **claim 30**, Senoh in view of Taira discloses the apparatus of claim 14, wherein the playitem is a pair of IN and OUT points corresponding to positions on a time axis of the clip of the data stream. Senoh at para. 0051<sup>7</sup>.
36. **Claims 31 and 32** are essentially claims 29 and 30 and are rejected for the same reasons.

### *Response to Amendment*

#### **Objection to claims 13 and 21-24 for Minor Informalities**

37. Applicant’s amendment to claims 13 and 21-24 to address the minor informalities is acknowledged. Consequently, the objection to claims 13 and 21-24 is withdrawn.

---

<sup>6</sup> \*.MOD files are interpreted as stream files and \*.MOI files are interpreted as clip information files.

<sup>7</sup> Playback program information (i.e., playitem) includes StartPos (i.e., IN) and EndPos (i.e., OUT) points corresponding to start and end time.

*Response to Arguments*

**Rejection of claims 1, 3, 6, 12, 13, 16-20, 23, and 24 under 35 U.S.C. 102(b)**

38. Claim 3 is cancelled rendering the rejection to it moot.

39. Applicant's arguments in regards to the rejections to claims 1, 6, 12, 13, 16-20, 23, and 24 under 35 U.S.C. 102(b), have been fully considered but they are not persuasive. Applicant alleges that Senoh fails to disclose (1) "an indicator for managing a first playback of the recording medium when the recording medium is first read", (2) "the first playback indicator identifying a segment for execution at the first playback of the recording medium" and (3) "the identified segment including at least one navigation command for launching a playlist file" (Remarks at 11.) The Examiner respectfully disagrees.

40. In regards to limitation (1), Applicant's allegation seems to be based on the interpretation of "when the recording medium is first read." Applicant seems to interpret the phrase to mean the very initial playback of the medium, an event that only occurs once for a given device. However, this is not the only reasonable interpretation. The phrase "when the recording medium is first read" could be interpreted to mean playback each time the medium is re-inserted into the player. Each time the medium is inserted into the player, it is "first read" for that particular time and according to Senoh, the Resume Marker would be used. Thus, Senoh discloses an indicator for managing a first playback of the recording medium when the recording medium is first read. In regards to limitation (2), Applicant argues Senoh's ResumeMarker does not identify program information PRG\_INFO for execution (Remarks at 11.) On the contrary, ResumeMarker identifies a program ID, which corresponds to a specific PRG\_INFO. As can be seen in Figure

---

3, ResumeMarker contains the value of a program ID. Figure 5 displays the structure of PRG\_INFO, which has an attribute "Program ID." Thus, ResumeMarker, having a program ID value, identifies a specific PRG\_INFO. Thus, Senoh discloses the first playback indicator identifying a segment for execution at the first playback of the recording medium. In regards to limitation (3), Applicant argues Senoh's PrgID does not launch the playlist manager file (Remarks at 11.) Limitation (3) does not require the action of launching a playlist manager file. Instead, the limitation requires a navigation command for launching a playlist file. Senoh discloses a PrgID, which corresponds to a particular playlist that is launched using the PrgID. Senoh at Fig. 7; Fig. 12. Thus, Senoh discloses the identified segment including at least one navigation command for launching a playlist file. Consequently, the rejection to claims 1, 6, 12, 13, 16-20, 23, and 24 under 35 U.S.C. 102(b) is maintained.

**Rejection of claims 14, 15, 21, and 22 under 35 U.S.C. 103(a)**

41. Applicant's arguments in regards to the rejections to claims 14, 15, 21, and 22 under 35 U.S.C. 103(a), have been fully considered but they are not persuasive. Applicant relies on the arguments presented in regards to claim 1, which has been addressed above.

42. Consequently, the rejection to claims 14, 15, 21, and 22 under 35 U.S.C. 103(a) is maintained for at least the reasons discussed above.

***Conclusion***

43. **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

44. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

45. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Le whose telephone number is 571-272-7970. The examiner can normally be reached on Mon-Thurs : 9:30am-6pm, Fri: 8am-4:30pm.

46. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

47. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Michael Le/  
Examiner, Art Unit 2163

/Wilson Lee/  
Primary Examiner, Art Unit 2163

11-9-09